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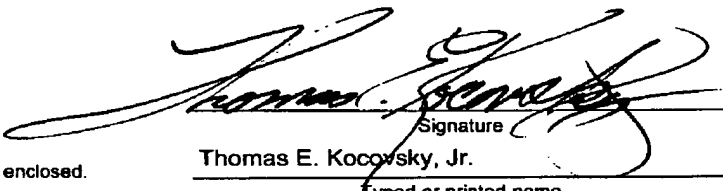
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PTO/SB/33 (09-08)

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| | | | |
|---|--|---|--|
| PRE-APPEAL BRIEF REQUEST FOR REVIEW | | Docket Number (Optional) MAKO 2 00027-3 | |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] <i>faxed</i> on <u>October 9, 2008</u> Signature <u>Hilary M McNulty</u> Typed or printed name <u>Hilary M. McNULTY</u> | | Application Number <u>10/621,119</u> Filed <u>07/16/2003</u> First Named Inventor <u>A. QUAID, et al.</u> Art Unit <u>3737</u> Examiner <u>E. CHAO</u> | |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. | | | |
| I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. <u>28,383</u> Registration number <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ | |  Signature <u>Thomas E. Kocovsky, Jr.</u> Typed or printed name <u>216-861-5582</u> Telephone number <u>October 9, 2008</u> Date | |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*. | | | |
| <input type="checkbox"/> *Total of _____ forms are submitted. | | | |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re application of |) | Examiner: E. CHAO |
| A. QUAID et al. |) | |
| |) | Art Unit: 3737 |
| Serial No.: 10/621,119 |) | |
| |) | Confirmation: 9089 |
| Filed: July 16, 2003 |) | |
| |) | |
| For: GUIDANCE SYSTEM AND |) | |
| METHOD FOR SURGICAL |) | |
| PROCEDURES WITH |) | |
| IMPROVED FEEDBACK |) | |
| |) | |
| Date of Last Office Action: |) | |
| June 9, 2008 |) | |
| |) | |
| Date of Advisory Action: |) | |
| September 17, 2008 |) | |
| |) | |
| Attorney Docket No.: |) | Cleveland, OH 44114 |
| MAKO 2 00027-3 / Z017 |) | October 9, 2008 |

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The applicants are filing herewith a Notice of Appeal and the Notice of Appeal fee.

The claims in the present application stand rejected in the Final Rejection of June 9, 2008 under:

35 U.S.C. § 112 on the grounds that the Examiner does not understand the phrase "haptic object" even though it is a common phrase in the art to which this application is directed;

Certificate of Faxing

I certify that this **PRE-APPEAL BRIEF REQUEST FOR REVIEW** in connection with Ser. No. 10/621,119 is being
☒ transmitted to facsimile number 571/273-8300 under 37 C.F.R. § 1.8 on the date indicated below.

Date
October 9, 2008

| |
|---------------------------------------|
| Signature <i>Hilary M. McNulty</i> |
| Printed Name Hilary M. McNULTY |

-2-

35 U.S.C. § 102 as being anticipated by Taylor, which does not disclose a haptic object as claimed; or.

35 U.S.C. § 103 over Taylor in view of Wodicka which does not cure the shortcomings of Taylor.

The 35 U.S.C. § 112 rejection was a new ground of rejection in the June 9, 2008 Final Rejection. In the After Final Amendment C of August 8, 2008, the applicant addressed the definition of "haptic object" in detail, providing the definitional basis for this term in the specification and in the haptic arts. The Advisory Action of September 17, 2008 failed to address the 35 U.S.C. § 112 issue, and advised the applicant whether the extensive showing that "haptic object" is a common term in the haptic arts was successful in overcoming the 35 U.S.C. § 112 rejection.

35 U.S.C. § 112

First, the applicant refers the Examiner and the Panel to pages 15-18 of the August 8, 2008 Amendment, which set forth in detail why "haptic object" is a term that is well-known in the art.

Second, the phrase "haptic object" is defined in the claims themselves. Claim 1, by way of example, states:

... haptic object defined by at least one of
a mapping between a pose of the tool and an output wrench of the haptic device and
a mapping between a wrench applied by the user to the haptic device and an output position of the haptic device.

Thus, the claims themselves define "haptic object".

Third, the applicant directs the Examiner and the Panel's attention to paragraphs [0030] and [0031] of the specification which also define "haptic object".

Fourth, "haptic object" is a well-known term in the art as evidenced by pages 15-18 of the August 8, 2008 Amendment and the extrinsic evidence referenced therein. It is submitted that the Examiner's lack of knowledge of commonly used terms in the art is not a proper basis for a 35 U.S.C. § 112 rejection.

-3-

Fifth, MPEP §2111.01 indicates that the applicant can be his own lexicographer. Paragraphs [0030] and [0031] provide a complete definition of the term “haptic object”.

35 U.S.C. § 102/103

Claim 1, for example, calls for
the object of interest includes at least one haptic object defined by at least one of
a mapping between a pose of the tool and an output wrench of the haptic device and
a mapping between a wrench applied by the user to the haptic device and an output position of the haptic device.

Taylor does not relate to a haptic device as defined by claim 1. The Examiner effectively concedes that Taylor does not disclose a haptic object as defined by claim 1 in the Advisory Action, in which he states that claim 1 “excludes Examiner’s initial interpretation that a mapping between the pose of the tool would be sufficient to meet the limitation.”

That is, the Examiner has effectively conceded that claim 1 is not anticipated by Taylor as asserted in the Final Rejection and that the only way the Examiner can even arguably try to make claim 1 read on Taylor is to interpret “haptic object” incorrectly and inconsistently with its common usage in the art to which this application pertains.

A “mapping between the pose of the tool” is unclear, but it appears that the Examiner is trying to say that he was trying to interpret the above-quoted language from claim 1 as merely determining the orientation of a tool. Such an interpretation completely ignores the phrase “haptic object” and the definitions of it which appear within claim 1. More specifically, there is no suggestion in Taylor or in the Examiner’s definition of an output wrench of a haptic device or an input wrench applied to the haptic device.

Claim 1 calls for a haptic object defined by a mapping between a pose of the tool and an output wrench of the haptic object or a mapping between a wrench applied by the user to the haptic device and an output position of the haptic device.

-4-

Taylor fails to disclose or fairly suggest a haptic object as defined in claim 1. Taylor, by contrast, relates to an image-guided surgery system in which surgical instruments are monitored during a surgical procedure and their locations are displayed or superimposed on a diagnostic image. The system includes passive manipulation aids (column 13, line 46) to provide real-time advice to the surgeon based on the sensed relationship between a surgical plan and a surgical execution (column 13, lines 49-52). The system enhances what the surgeon sees, such as by visibly displaying the path of a surgical instrument on a displayed diagnostic image. This enables the surgeon to plan a trajectory for the surgical instrument and plot it on the image. By monitoring the position of the tools, such as with a video camera, the tool can be superimposed on the same diagnostic image such that the surgeon can see if the tool is following the planned trajectory. Because the surgeon may not want to observe the video display continuously, "advice" is provided in other ways as well as visual. For example, an audible signal can be generated when the instrument deviates from the path (column 20, lines 49-50). As another example, the system can provide resistance or braking force to indicate that the surgical tool is deviating from the planned trajectory (column 21, lines 13-15) or can even lock the tool from moving off the trajectory (column 14, lines 21-25). Unlike the present invention, these resistance or braking forces cannot generate forces as described in Claim 1. The resistance or braking forces are only generated based on the user's motion, i.e., when the user pushes against the brake.

Thus, Taylor is concerned with visualizing the position of a surgical tool in the interior of a patient where it is not readily observable by displaying the tool or a representation of a tool on a diagnostic image and which gives the surgeon "advice" if the tool is moved other than along a planned trajectory.

Accordingly, it is submitted that Taylor neither discloses nor otherwise puts the reader in possession of the concept of using a haptic object which is defined by at least one of mapping between a pose of the tool and an output wrench of the haptic device or a mapping between a wrench applied by the user to the haptic device and an output position of the haptic device.

The other independent claims also call for a "haptic object".

Wodicka, which was applied against some of the independent and dependent claims was not cited to and does not cure this shortcoming of Taylor.

-5-

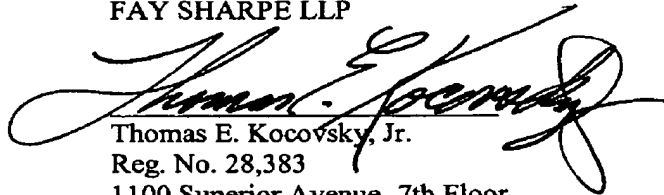
Wodicka, which discloses a device for acoustically guiding an endotracheal tube, does not disclose or suggest modifying Taylor to add a haptic object as defined by the claims.

For the reasons summarized above and as set forth in greater detail in the Amendment C of August 8, 2008, it is submitted that all claims comply with the requirements of 35 U.S.C. §§ 102, 103, and 112.

An early withdrawal of the Final Rejection and an allowance of all claims is requested.

Respectfully submitted,

FAY SHARPE LLP



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